CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	Hagenbarth Prickly Pear Reduction Project
Proposed Implementation Date:	Winter, 2009
Proponent:	Jim Hagenbarth – Lessee
Location:	T5S R8W Section 12
County:	Beaverhead

I. TYPE AND PURPOSE OF ACTION

This proposed project is located approximately 13 miles North of Dillon near the Beaverhead – Madison County line. The site is currently dominated by prickly pear cactus (Oppuntia spp) and needle-and-thread grass (Stipa comata). The lessee is proposing to use a drag made from the tops of mine equipment tires. The tires were used for stock water tanks with the tops being salvaged for use in this project. The tire-tops are chained to a pull bar and pulled behind a tractor. The purpose of the project is to reduce the occurrence of prickly pear cactus and increase forage production on approximately 100 acres of Trust Land. Topography on the site is gently rolling. The proponent wishes to use the drag during the winter months to break off the above ground portion of the cactus where the leaves would freeze solid and die while grasses and forbs are in winter dormancy when effects on these species would be minimized. The lessee tested the idea on adjacent private lands with desired results. After 1 year, prickly pear was much reduced in frequency while grass and forb (other than cactus) production improved.

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

Provide a brief chronology of the scoping and ongoing involvement for this project.

Vanna Boccadori, Montana Department of Fish, Wildlife, & Parks Biologist
Patrick Rennie, DNRC Archaeologist
Montana Natural Heritage Program
Monte Mason – DNRC Minerals Bureau Chief

2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

3. ALTERNATIVES CONSIDERED:

Alternative A – No Action alternative. The lessee would not be allowed to conduct cactus control on the lease.

Alternative B – To allow the lessee to use the drag to reduce cactus and increase grass and forb production on the affected lease ground.

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" If no impacts are identified or the resource is not present.*

4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:
Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify any cumulative impacts to soils.

Four unique ecological sites were identified in the Natural Heritage report. These sites include Block Mountain, Sandy Hollow, Silverbow Meadows, and the Hogback. These sites are well outside the project area and will not be affected by the proposal.

Soils on site are Kalsted in alluvial fan-type formation. Soils are a class 4e with moderate wind/water erosion potential. The proposed project would not completely remove surface vegetation. Prickly pear cactus would be selectively removed by the drag, leaving existing grasses and forbs on site as permanent cover. Soils would not be significantly impacted by this project.

5. WATER QUALITY, QUANTITY AND DISTRIBUTION:
Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.

No surface water sources are located within 1 mile of the proposed project area.

6. AIR QUALITY:
What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.

No air quality issues would be produced as a result of this proposed project.

7. VEGETATION COVER, QUANTITY AND QUALITY:
What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify cumulative effects to vegetation.

The current vegetative community on site is dominated by prickly pear cactus and needle-and-thread grass. The lessee proposes to drag the ground surface to break off the prickly pear plants during the winter to reduce prickly pear abundance and improve forage availability and production. Treatment during the winter would minimize impacts to grasses and forbs dormant below ground level. Cumulative effects to the vegetative community would include a reduction in abundance of prickly pear from approximately 25% to 5% and a similar subsequent increase in the needle-and-thread component.

8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:
Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify cumulative effects to fish and wildlife.

No effects on fish would result from this project. The nearest above ground water source is over 1.5 air miles from the project site. Pronghorn antelope are the primary big game species inhabiting and using the site. A reduction in abundance of prickly pear could improve forage for this species. No cumulative effects to fish and wildlife are expected to result from this project. Work on the project would occur during the winter months when most migratory species are not present and the ground frozen. Expected completion of the project would be one to two days, limiting human disturbance to wildlife to a minimum.

9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:
Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify cumulative effects to these species and their habitat.

Swainson's Hawk - (Buteo swainsoni) – Swainson's Hawks migrate into the area in late April to early May. They nest in timber in river bottoms, brushy canyons and coulees, and shelterbelts and hunt in grasslands. Nesting habitat would not be affected by this project. Timing of the project is during the winter at a time when Swainson's hawks are not present and human influence on their use of the area would be nonexistent. Hunting habitat in the project area should not be adversely affected by the limited disturbance of the proposed project. The proposed project would result in a decrease in prickly pear cactus abundance while leaving the existing dormant grasses and forbs intact.

Long-billed Curlew - (Numenius americanus) – Long-billed curlew's are known to nest and summer in and around the project area. The project would be completed during the winter months when curlews are not present in the area. Grasses and forbs other than prickly pear would not be affected by the proposed project. Nesting and summer habitat would not be negatively affected by the proposed project.

Sage Thrasher – (Oreoscoptes montanus) – Sage thrasher's are a BLM listed sensitive species. The sage thrasher migrates into Montana to nest and summer on sagebrush sites in late April to mid-May. No sagebrush communities occupy sites within ½ mile or more of the proposed project area. Habitat for the sage thrasher would not be affected by the proposed project.

Brewer's Sparrow – (Spizella Breweri) – Brewer's sparrow is a BLM listed sensitive species. Brewer's sparrow migrates into Montana to nest and summer on sagebrush sites in mid to late May. No sagebrush communities occupy sites within ½ mile or more of the proposed project area. Habitat for the sage thrasher would not be affected by the proposed project.

Grasshopper Sparrow – (Ammodramus savannarum) – Grasshopper sparrows are listed as a Montana species of concern. The sparrows arrive in Montana in Spring, preferring to nest in open prairie settings. The timing of the proposed project is during the winter months. No impact to grasshopper sparrow nesting would occur. The sparrows diet of insects and grasshoppers would not be impacted by the project as the native grassland/forb community would remain intact except for a significant decrease in prickly pear cactus.

Gray Wolf – (Canus lupus) – No breeding pairs or packs are known to inhabit the project area. The nearest known breeding pair or packs range is located over 15 air miles Southwest of the project in the Ruby Mountain Range. The site is located in an open rolling grassland area with little cover and very limited use by elk. The current lack of use in the area by wolves coupled with the short duration of human activity associated with the project and lack of significant ground surface alteration would not inhibit or change use patterns of the area by wolves.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:
Identify and determine effects to historical, archaeological or paleontological resources.

Patrick Rennie, DNRC Archaeologist, was contacted regarding the proposed project. No sites have been recorded on the tract. No sites were found during a field inspection by the Dillon Unit Land Use Specialist.

11. AESTHETICS:
Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify cumulative effects to aesthetics.

The proposed project is not located on a prominent topographic feature and will not be visible from populated or scenic areas.

12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:
Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify cumulative effects to environmental resources.

The proposed project will not require any limited resources and would not affect other activities located near the project area. No cumulative effects to environmental resources are expected as a result of this project.

13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:
List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.

This tract is currently leased out for oil & gas exploration purposes. No further action has been taken to date in regard to on-the-ground exploration. Monte Mason, DNRC Minerals Management Bureau Chief, was consulted regarding any potential conflicts between the proposed project and minerals leasing. His response was that no conflicts were to be expected as a result of this project.

IV. IMPACTS ON THE HUMAN POPULATION

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" If no impacts are identified or the resource is not present.*

14. HUMAN HEALTH AND SAFETY:
Identify any health and safety risks posed by the project.

The proposed project would not affect human health and safety of the area.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:
Identify how the project would add to or alter these activities.

The proposed project would benefit the lessee by improving forage production and utilization of the site by reducing the abundance of prickly pear cactus. The trust beneficiary would benefit by increased forage availability and a subsequent increase in rental income.

16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:
Estimate the number of jobs the project would create, move or eliminate. Identify cumulative effects to the employment market.

The project would not create, move, or eliminate jobs.

17. LOCAL AND STATE TAX BASE AND TAX REVENUES:
Estimate tax revenue the project would create or eliminate. Identify cumulative effects to taxes and revenue.

The project would not increase tax base or revenues.

18. DEMAND FOR GOVERNMENT SERVICES:
Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify cumulative effects of this and other projects on government services.

No additional demand for government services would result from this project.

19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:
List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.

No additional environmental plans or goals were received or mentioned in conducting scoping for this project.

20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:
Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify cumulative effects to recreational and wilderness activities.

The project would not alter recreational activities in the area. Currently there is no public access to these tracts.

21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:
Estimate population changes and additional housing the project would require. Identify cumulative effects to population and housing.

No change in density or distribution of population and housing would result from this project.

22. SOCIAL STRUCTURES AND MORES:
Identify potential disruption of native or traditional lifestyles or communities.

No change in social structures and mores would result from this project.

23. CULTURAL UNIQUENESS AND DIVERSITY:
How would the action affect any unique quality of the area?

No effect on cultural uniqueness and diversity would result from this project.

24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:
Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify cumulative economic and social effects likely to occur as a result of the proposed action.

The primary beneficiary of the proposed project would be the lessee in regard to freeing up a large part of the acreage to grazing and the ability to utilize the aum's assigned to the tract. Currently prickly pear makes up 20-25% of ground cover on the site making the forage growing in and immediately around these islands unusable. Desired results would include 5% or less prickly pear on-site. The benefit to the trust would be a modest increase in aum's assigned at the beginning of the next lease period, estimated to be a 5 AUM increase. At the 2009 rate of $6.97/AUM, an increase of approximately $35.00 per year is expected as a result of this project.

EA Checklist Prepared By:	**Name:**	Charles Maddox	**Date:**	3/4/09
	Title:	Land Use Specialist		

V. FINDING

25. ALTERNATIVE SELECTED:

Alternative B – To allow the lessee to use the drag to reduce cactus and increase grass and forbs production on the affected lease ground.

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

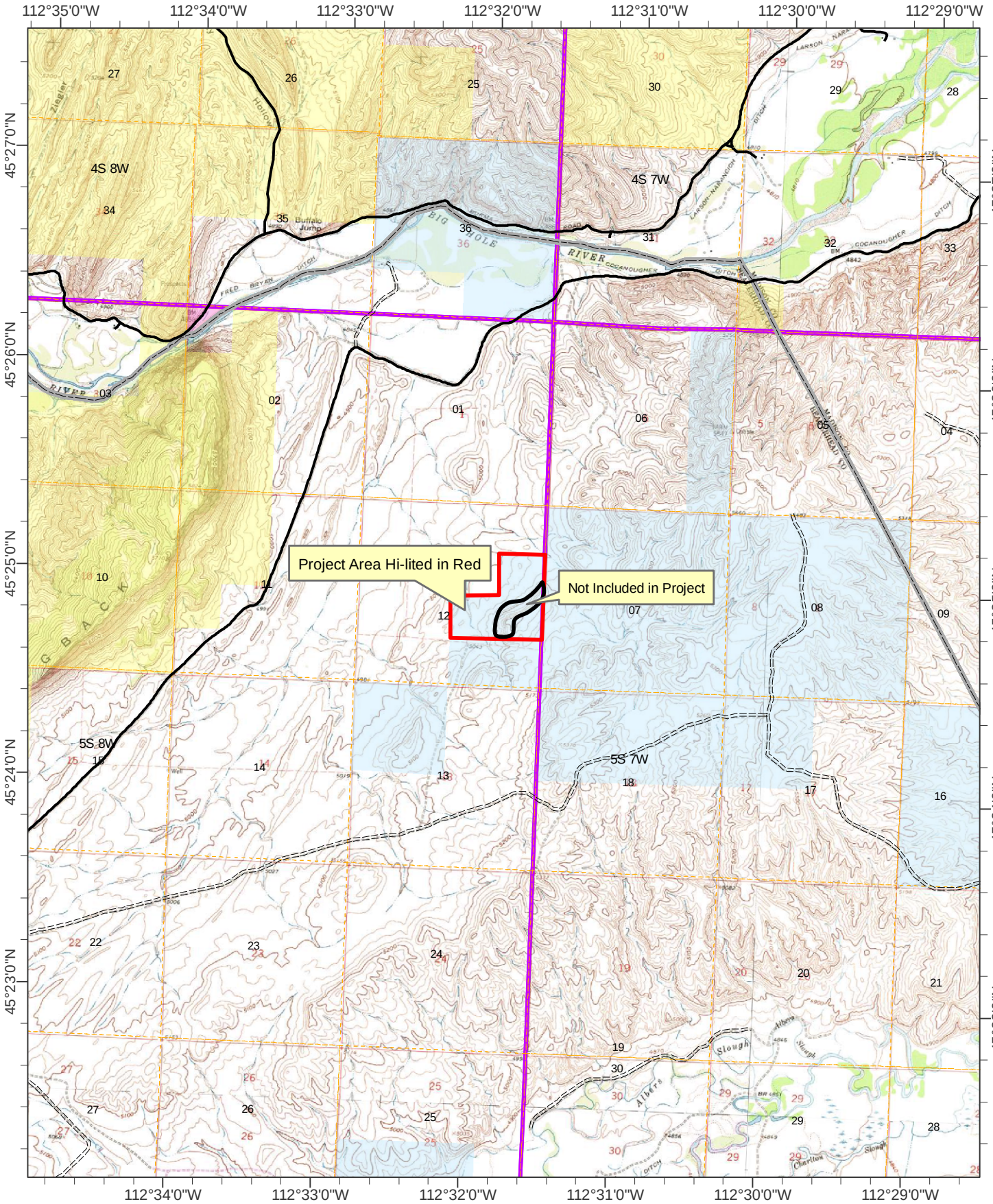
This proposal should be an overall improvement to the lease and also help generate additional income for the trust over the long term. There are no known significant impacts from this project.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

	EIS		More Detailed EA	X	No Further Analysis

EA Checklist Approved By:	**Name:**	Timothy Egan
	Title:	Dillon Unit Manager
Signature: Timothy Egan		**Date**: March 5, 2009

Hagenbarth Prickly Pear Reduction Project



March 5, 2009